APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,030	01/17/2001	Jose Villena	CellIT-008XX	8067

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EXAMINER
CHOUDHURY, AZIZUL Q

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/764,030	VILLENA, JOSE
	Examiner	Art Unit	
	Azizul Choudhury	2143	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *1/17/2001*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-20* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *17 January 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some *   c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

Specification

The disclosure is objected to because of the following informalities:

- On page 6, line 9, it is believed that the term "pack" is intended to be
  the term "back".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

Claims 1-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the
alternative, under 35 U.S.C. 103(a) as obvious over Kasi et al (US Pat No:
US006256641B1), hereafter referred to as Kasi.

1.   With regards to claim 1, Kasi teaches a system for processing transactions, each
transaction requiring one or more database accesses, the system comprising plural
client applications, plural transaction switches, and plural transaction engines, wherein
client applications requiring transactions are configured to send a request for such
transaction to a selected one of said transaction switches, wherein said selected
transaction switch is configured to send said transaction to a selected transaction
engine to perform said one or more database accesses, and wherein said transaction
switch selects said transaction engine in a manner that attempts to balance loading
across said transaction engines in a predetermined manner

(The design claimed is essentially is a three-tier system for databases. Kasi teaches a design for a three-tier system for databases (column 3, lines 14-18, Kasi). In a three-tier design, client machines make database requests to a middleware (column 3, line 35, Kasi), which performs the request operations on the databases as needed. The engines claimed are middleware and is performed by servers within Kasi's design (column 3, lines 14-33, Kasi). In addition, Kasi's design is able to be used within a large network (column 4, line 21, Kasi). Since a client makes a request to a server (engine) within a large network, it is inherent that switches are used as claimed and that the switches will transfer the request from the client to the server (engine). The server (engine) then functions as claimed to retrieve the data from the appropriate databases (column 5, lines 24-35, Kasi). In addition, load balancing is practiced within Kasi's design (column 4, lines 47-53, Kasi). In the load balancing of Kasi's design, the servers (engines) are selected in a manner to balance loading as claimed. This load balancing is attached to the network in Kasi's design. Since the load balancing is attached to the network, it influences the performance of the devices that control the flow of data in networks, such as switches. Hence, since switches inherently must be present within such a design, and the switches select which server (engine) to select to service a client request, it is inherent that the switch selects the server (engine) in manner to achieve load balancing as claimed).

2.   With regards to claim 2, Kasi teaches a system wherein said transaction switch is configured to determine how many database accesses are required, and to utilize such

determination, at least in part, to assign said transaction to a transaction engine (Kasi states that the load balancing in the design has a number of methods to yield balanced loads. Kasi goes on to state that the load balancing is performed to avoid overloading any servers (engines) (column 4, line 51, Kasi). To achieve this, it is inherent that means by which to determine how many database accesses are required are present within Kasi's design).

3.   With regards to claim 3, Kasi teaches a system wherein said transaction switch is configured to determine a priority of said transaction, and to utilize said priority, at least in part, to assign said transaction to a transaction engine (Kasi states that the load balancing in the design has a number of methods to yield balanced loads. Kasi goes on to state that the load balancing is performed to avoid overloading any servers (engines) (column 4, line 51, Kasi). To achieve this, it is inherent that means by which to determine a priority of transactions as claimed are present within Kasi's design).

4.   With regards to claim 4, Kasi teaches a system wherein said transaction switch is configured to determine bandwidth utilization of a communications link to a database, and to utilize said bandwidth utilization, at least in part, to assign said transaction to a transaction engine (Kasi states that the load balancing in the design has a number of methods to yield balanced loads. Kasi goes on to state that the load balancing is performed to avoid overloading any servers (engines) (column 4, line 51, Kasi). To

achieve this, it is inherent that means by which to determine bandwidth utilization are

present within Kasi's design).

5.   With regards to claim 5, Kasi teaches a system wherein said transaction switch

utilizes at least two of bandwidth utilization to a database, priority, and number of

database accesses required in order to assign the transaction to a transaction engine

(Kasi states that the load balancing in the design has a number of methods to yield

balanced loads. Kasi goes on to state that the load balancing is performed to avoid

overloading any servers (engines) (column 4, line 51, Kasi). In addition, Kasi's design

has multiple databases, clients and servers (engines) (column 3, lines 14-17, Kasi).

Furthermore, Kasi's design has multiple connection routes (Figure 6, Kasi). To achieve

this, it is inherent that means by which to determine bandwidth utilization are present

within Kasi's design).

6.   With regards to claim 6, Kasi teaches a system wherein each client application

comprises software for selecting which transaction switch should be utilized to assign

the transaction to a transaction engine (Kasi's design has applications within each client

(column 3, lines 15-16, Kasi). In addition, it is inherent that such applications are used

for the client to select a switch with which to submit a request with).

7.   With regards to claim 7, Kasi teaches a system connected to a contact center to

process incoming or outgoing contacts (It is inherent that a contact center would be

present in such a design. In addition, Kasi's design has requests and replies handled
(Figure 2, Kasi). For such processes to occur, contact centers must exist).

8.   With regards to claim 8, Kasi teaches a method of processing contacts at a
contact center comprising the steps of: establishing a communication session between
a client application to process a transaction for said contact and a transaction switch;
determining a loading factor associated with said transaction based upon said loading
factor, assigning said transaction to one of plural transaction engines to perform multiple
database accesses in furtherance of said transaction, wherein said transaction switches
do not communicate directly with said database, but said transaction engines do (It is
inherent that a contact center would be present in such a design. In addition, Kasi's
design has requests and replies handled (Figure 2, Kasi). For such processes to occur,
contact centers must exist. Furthermore, Kasi's design is able to be used within a large
network (column 4, line 21, Kasi). Since a client makes a request to a server (engine)
within a large network, it is inherent that switches are used as claimed and that the
switches will transfer the request from the client to the server (engine). The server
(engine) then functions as claimed to retrieve the data from the appropriate databases
(column 5, lines 24-35, Kasi)).

9.   With regards to claim 9, Kasi teaches a method further comprising the step of
broadcasting a value indicative of the present loading of each transaction engine to the
transaction switches (Kasi states that the load balancing in the design has a number of

methods to yield balanced loads. Kasi goes on to state that the load balancing is performed to avoid overloading any servers (engines) (column 4, line 51, Kasi). To achieve this, it is inherent that means by which to broadcast loading information on each server (engine) to the switches are present within Kasi's design).

10. With regards to claim 10, Kasi teaches a method wherein said each of said communication sessions is associated with a backup link to facilitate communications in the event of a failure (Kasi's design has multiple connection routes (Figure 6, Kasi)).

11. With regards to claim 11, Kasi teaches a method wherein said assigning comprises assigning both a primary and a backup transaction engine (Kasi's design has multiple connection routes, this includes a choice between servers (engines) should one be unable to serve (Figure 6, Kasi)).

12. With regards to claim 12, Kasi teaches a method wherein the assigning is accomplished in a round robin fashion (Round robin is one of the methods applicable in Kasi's load balancing (column 4, line 53, Kasi)).

13. With regards to claim 13, Kasi teaches an apparatus for processing multiple transactions, some of which require multiple accesses to databases, said apparatus comprising plural transaction engines for directly accessing the databases to perform said required multiple accesses, and a switching system for determining loading

introduced by each transaction on a transaction engine to process said transaction, and

for assigning said transactions in a manner based upon said loading (The design

claimed is essentially is a three-tier system for databases. Kasi teaches a design for a

three-tier system for databases (column 3, lines 14-18, Kasi). In a three-tier design,

client machines make database requests to a middleware (column 3, line 35, Kasi),

which performs the request operations on the databases as needed. The engines

claimed are middleware and is performed by servers within Kasi's design (column 3,

lines 14-33, Kasi). In addition, Kasi's design is able to be used within a large network

(column 4, line 21, Kasi). Since a client makes a request to a server (engine) within a

large network, it is inherent that switches are used as claimed and that the switches will

transfer the request from the client to the server (engine). The server (engine) then

functions as claimed to retrieve the data from the appropriate databases (column 5,

lines 24-35, Kasi). In addition, load balancing is practiced within Kasi's design (column

4, lines 47-53, Kasi). In the load balancing of Kasi's design, the servers (engines) are

selected in a manner to balance loading as claimed. This load balancing is attached to

the network in Kasi's design. Since the load balancing is attached to the network, it

influences the performance of the devices that control the flow of data in networks, such

as switches. Hence, since switches inherently must be present within such a design,

and the switches select which server (engine) to select to service a client request, it is

inherent that the switch selects the server (engine) in manner to achieve load balancing

as claimed).

14.   With regards to claim 14, Kasi teaches an apparatus wherein said switching

system is configured to attempt to balance the loading across multiple transaction

engines in accordance with a predetermined criteria (Kasi states that the load balancing

in the design has a number of methods to yield balanced loads. Kasi goes on to state

that the load balancing is performed to avoid overloading any servers (engines) (column

4, line 51, Kasi). To achieve this, it is inherent that means by which to determine a

priority of transactions as claimed are present within Kasi's design).

15.   With regards to claim 15, Kasi teaches an apparatus wherein said predetermined

criteria includes priority of transactions being processed (Kasi states that the load

balancing in the design has a number of methods to yield balanced loads. Kasi goes on

to state that the load balancing is performed to avoid overloading any servers (engines)

(column 4, line 51, Kasi). To achieve this, it is inherent that means by which to

determine how many transactions are required are present within Kasi's design).

16.   With regards to claim 16, Kasi teaches an apparatus wherein said predetermined

criteria includes volume of data to be entered or read out from a database (Kasi states

that the load balancing in the design has a number of methods to yield balanced loads.

Kasi goes on to state that the load balancing is performed to avoid overloading any

servers (engines) (column 4, line 51, Kasi). To achieve this, it is inherent that means by

which to determine volume are present within Kasi's design).

17.   With regards to claim 17, Kasi teaches an apparatus wherein each transaction engine is resident on a different computer (The transaction engine of Kasi's design is resident within a server (column 3, lines 14-32, Kasi)).

18.   With regards to claim 18, Kasi teaches an apparatus wherein the transaction engines communicate with each other via a local area network (Kasi's design is able to be used within a large network (column 4, line 21, Kasi). In addition, figures show that the devices are located within LANs as claimed (Figure 6, Kasi). Hence, networks are used in Kasi's design).

19.   With regards to claim 19, Kasi teaches an apparatus wherein all communications between a transaction switch and a transaction engine are performed via backup up communications links (Kasi's design has multiple connection routes (Figure 6, Kasi)).

20.   With regards to claim 20, Kasi teaches an apparatus wherein at least one database has a synchronized backup and an archive backup that is not synchronized (Kasi's design allows for database recovery (column 4, lines 39-47, Kasi)).

Remarks

After careful evaluation of the applicant's application, the examiner has failed to notice any design features that would demonstrate the design as being truly unique. Should the applicant feel that this decision is incorrect, they may provide an appropriate

response, explaining why the decision is incorrect. In addition, if the applicant feels that there are details about the design that do make it unique, they are encouraged to make the necessary changes to properly reflect such features. The examiner currently feels that the best course of action that can be taken by the applicant would be to amend the claims (and specifications if needed) in attempts to overcome the rejections above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azizul Choudhury whose telephone number is 703-305-7209. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 703-308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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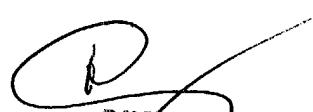
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